

## SPECIFICATIONS FOR DUAL CHAMBER TEMPORARY

### PACEMAKER:

1. Should have touch screen facility for ease of operation and lightweight (less than 700 g)
2. Should have an additional internal battery back up to facilitate quick change of normal AA battery.
3. Should be able to be attached easily to the patient arm, let or IV pole.
4. Should have rapid atrial pacing to manage atrial flutter safe and reliable.
5. Should have safety awareness ranges to alert clinicians to areas of caution.
6. Should have modes AOO, AAI, AAT, VOO, VVI, VVT, DDD, DDI, DVI, DAI, DOO, DDT, VDD, AND VAT.
7. Should have a basic pacing rate of 30 to 180ppm which is continuously adjustable.
8. Should have a rapid atrial pacing rate of 40 to 1000ppm.
9. Should have rapid atrial pacing rate:  
40 to 120ppm in steps of 2ppm increments,  
120 to 200ppm in steps of 5ppm increments, 200 to 400ppm in steps of 10ppm increments 400 to 1000ppm in steps of 50 increments.
10. Should have an output amplitude Atrial: 0.1 – 20 mA and Ventricular: 0.1 – 25 mA.
11. Should have Atrium pulse width 0.7ms- 1 ms and Ventricle 1.5ms
12. Should have sensitivity atrial: 0.4 to 10 mv and ventricular: 0.8-20 mV, which is incrementally adjustable.
13. Refractory Period Atrial: 150 – 500 ms (PVARP)
14. Should have refractory 400ms for AXX modes and 250ms for VXX modes. Should have blanking pace 125ms and sense 75ms.
15. Should have two IEC type LR-6-sized AA batteries 1.5 alkaline batteries which are very easily available in the market.
16. Should have runaway protection depending on rate settings.
17. Should have backup battery life > 150hrs.
18. Should have AV/PV delay 1.5ms to 300ms. Setting automatic depending on the rate manual.
19. Should have PVARP 100 TO 500ms setting automatic depending on rate

*Jal*  
*base*

*h*

*J.*

Prof. Avinash Agrawal  
MD, IDCC, FCCP, FICCM, FICCM, FCCP (USA)  
Head, Department of Cardiology  
King George's Medical University, UP, India

*Ab*

or normal.

20. Should have TARP AV Delay +PVARP with minimum rate + 60ppm.
21. Should have AV/VA blanking 70ms.
22. Should have UTR/MTR rate + 40ppm.
23. Should have noise detection at 125ms in automatic mode switch to asynchronous mode.
24. Pacing cable should be provided.

**Conditions for tender:**

1. All accessories should be from the same Original Equipment Manufacturer for the main unit.
2. Instruments must be ISO certified and a copy should be enclosed. (The ISO Certificate must be issued by any organization accredited by the Bureau of Indian Standard or accredited by the international accrediting forum "IAF" (Certificate to be attached).
3. Should be USA FDA and European CE be approved by 4 digits notified body.
4. Other necessary certifications if any required will be provided by the bidder for the smooth functioning of the machine.
5. Installation process should be performed by O.E.M trained service engineers/ service representatives on OEM letterhead or Service Report within 15 days of supply, with the mandatory provision of providing preventive services visit of OEM trained Service Engineer/ Service Representative quarterly per year till the completion of warranty period (i.e., 20 visits for the first 05 years) & further quarterly visits (04 visits/year) year till the completion of CMC period.
6. The equipment should have a Brand name/ Model Number embossed/etched on the equipment.
7. All the technical specifications in the compliance statement must be supported by Original Literature from the firm/ O.E.M with highlighting Numbering & flagging of all technical certificates.
8. Offered Equipment should have a strong Government Installation base.
9. Offered Equipment should have a Regional Sales Service Centre of the Original Equipment Manufacturer in the region for a 95 % uptime guarantee.
10. For the offered main unit, the essential, optional required consumables'/accessories' shelf life should be declared on the Original Equipment Manufacturer's letterhead.

*Jed*  
*See*

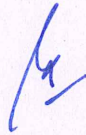
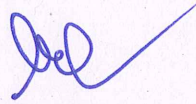
*h*

*J*

Prof. Avinash Agrawal  
MD, IDCC, FICCM, FICCM, FICCM, FICCM, FICCM, FICCM (USA)  
Head, Department of Cardiology  
King George's Medical University, Lucknow.  
Page 2 of 4

11. In case of technical snag/failure/breakdown the response time for the inspection should be within 24 hours and repair within 05 days otherwise provide a service machine/ alternate arrangement to be made till the period of recovery of the breakdown of the unit, failing which attracts penal action as per the decision of institute/ hospital.
12. For offered equipment the Training of technical staff and users should be performed by Original Equipment Manufacturer trained Service Engineers at the proper designated place- at bidders' cost.
13. Company should quote their latest model and need to provide an affidavit for the same.
14. As a tendering process the Demonstration of the offered Equipment is Mandatory at hospital/institute premises or other designated places at the bidder's cost.
15. The bidder must comply with the General Financial Rules and their modifications if any issued by the Government of India- 2017.
16. Any bidder from a country that shares a land border with India will be eligible to bid in the tender only if the bidder is registered with the Competent Authority (i.e., Registration certificate issued by the Ministry of Commerce and Industry (Department for Promotion of Industry and Internal Trade- DPIIT after October 2020). If any such bidder is not registered with DPIIT they will be liable for technical disqualification.
17. Principal (OEM) must authorize only one agent to be quoted in the bid otherwise multiple quotes through different agents in the same bid will be canceled.
18. The Bidder and its OEM both have to submit a notarized affidavit on the Indian Non-Judicial Stamp Paper of Rs.100/- that the bidder has not quoted the price higher than the current financial year and last financial year supplied to any government Institute/ Organization/ reputed Private Organization. OEM also has to submit that the price quoted by the bidder in the bid is on its behalf and the lowest in the current and last financial year in the country. Therefore, if at any stage it has been found that the supplier and its OEM have quoted lower rates than those quoted in this bid; the Institute (the purchaser) would be given the benefit of lower rates by the Supplier and any excess payment if any, will become immediately payable to the Institute (the purchaser). If such an affidavit is not submitted, the bid will be outrightly rejected. (Part of technical bid).
19. Guarantee / Warranty Period: Separate offers of Comprehensive Maintenance Contract (CMC on main equipment) and Annual Maintenance Contract (AMC on main equipment) for further 5 years after expiry of 5 years of warranty (i.e., 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup> and 10<sup>th</sup> years) in rupees only (and on basis of percentage of price) should be included

in a financial bid in the absence of which the offer is liable to be rejected. Payment for CMC/AMC shall be made only after the expiry of the warranty of 5 years, in case the Institute (the purchaser) decides for availing of CMC/AMC services. Contract for CMC/AMC shall be decided on expiry of warranty but rates (not more than 5% inclusive of all taxes for 6<sup>th</sup> to 10<sup>th</sup> year) will be frozen at the price of an issued purchase order before the release of payment by the Institute (the purchaser). However, the Institute (the purchaser) may decide not to enter into any CMC/AMC contract without assigning any reason for the same, which shall be binding upon the bid.



Prof. Avnish Agrawal  
MD, FICCP, FICCM, FICCM, FIACCM, FCCP (USA)  
Head, Department of Critical care,  
King George's Medical University, UP, I.

